

**Wesleyan University
Middletown, Connecticut**

FINAL REPORT

Section 2: Resource Conservation and Recovery Act (RCRA)

1.0 Failure to properly dispose of hazardous wastes

1.1 Specific Issue, Concern, or Violation(s) Disclosed

During URS Corporation's (URS) audit conducted on March 28-30, 2001 at Wesleyan University, it was observed that in some cases disposal of hazardous wastes was not in compliance with 40 CFR Part 262.10. Each of the individual violations is noted in Schedule B1. Principle locations where the violations occurred include:

- Painting studio, Art department
- Chemistry Stock room, Science Complex
- Various laboratories and chemical use areas, Hall-Atwater in the Science Complex
- Physical Plant, various shops

1.2 Date of Disclosure

URS mailed the audit report to Wesleyan University's outside legal counsel on April 10, 2001. The document was received by legal counsel on April 13, 2001, mailed out the same day and received by Wesleyan University on April 17, 2001. Violations were disclosed in writing to EPA Region 1 and the Connecticut DEP on April 27, 2001. (Refer to Document 1 in Appendix A).

1.3 Corrective Action Taken ¹

Wesleyan University conducted a campus-wide review of all chemical/waste storage areas. As part of that review, a comprehensive inventory of chemicals was taken, chemical containers were bar-coded for future reference and those items determined to be expired, no longer needed or actual waste products were identified, characterized and disposed of as hazardous waste in accordance with 40 CFR Part 262.10. Satellite accumulation areas (SAS) were established where needed and individuals have been trained in proper hazardous waste management and disposal.

Additionally, Wesleyan University has contracted with Triumvirate Environmental Services (Triumvirate) to ensure that the disposal of hazardous wastes occurs within every 90-day period.

1.4 Date Corrective Action Completed

Waste storage area cleanouts occurred on May 7-11, 2001 and May 14-15, 2001.

¹ The term "corrective action" used herein means correction of the disclosed violations. It does not mean "corrective action" as used in RCRA.

1.5 Steps Taken to Prevent Recurrence

The Chemistry Facilities Management staff conducts periodic inspections of laboratories, SAS, the chemistry stock room and the Conditionally Exempt Small Quantity Generator (CESQG) non-contiguous sites to ensure that all hazardous wastes are being disposed properly. In addition, Wesleyan University has contracted with Triumvirate to remove hazardous wastes for disposal from campus within every 90-day period. The Chemistry Facilities Manager maintains copies of all inspection forms and hazardous waste manifests in the Chemical Stock room located in Hall-Atwater Laboratories.

Annual training in hazardous waste management procedures will be conducted for all appropriate personnel. New personnel/students will receive appropriate training.

1.6 Repeat Violations

Neither this violation, nor that of a closely related violation, has occurred previously at Wesleyan University operations within the last three years.

1.7 Economic Benefit

Wesleyan University believes that there was no significant economic benefit associated with this violation. Wesleyan University has disposed of \$150,000 of hazardous waste during 2001 as a result of the audit. The costs for the removal of hazardous waste have increased significantly in recent years and there is no realized cost savings for having failed to dispose of the chemicals earlier.

1.8 Serious Actual Harm and Imminent and Substantial Endangerment Issues

No known serious or actual harm has occurred to human health or the environment as a result of this violation. There has been no report, and Wesleyan University has no knowledge, of any adverse consequence of the handling or discharge of hazardous waste on campus. In addition, no issues constituting imminent or substantial endangerment to human health or the environment exist with regards to the failure to dispose of used or expired chemicals located in the areas noted in Schedule B1.

1.9 Other Relevant Issues for Consideration

None.

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Building/Lab, Department	Issue or concern noted in March 28-30, 2001 Audit (April 27, 2001 Disclosure)	Formal violation disclosed	Specific Regulatory Cite for Disclosed Violation	Corrective Action Taken	Date of Completion	Steps Taken to Prevent Recurrence
Physical Plant/Wood shop	Paint brushes containing solvents are washed in the sink	Failure to properly dispose of hazardous wastes	22a-449(c)- 102(a)(1) of RCSA; 40 CFR 262.11 and 262.34(c)(1).	Oil-based painting operations have been reduced in the Physical Plant Wood Shop minimizing the need for solvents. Most oil based paints, varnishes, stains and sealants were transferred to the Paint/glazier shop area. Protocols have been developed for future use of all paint products and equipment. Employees have been trained not to use oil-based paints.	June 19, 2001	Individuals have been trained in proper SAS management, inspection and hazardous waste disposal. SASs have been set up at or near the point of hazardous waste generation.
Science Complex Chemistry stockroom	Lack of disposal of old or expired chemicals.	Failure to properly dispose of hazardous wastes	22a-449(c)- 102(a)(1) of RCSA; 40 CFR 262.11 and 262.34(c)(1).	Approximately 10,440 pounds of lab-packed state or EPA regulated, old chemicals were disposed according to state and federal requirements.	May 7-11, 2001 and May 14-15, 2001	A campus-wide chemical cleanout has been conducted. Wesleyan University has contracted with Triumvirate to ensure that laboratories and chemical use areas are frequently cleaned out, hazardous waste is identified and removed properly within each 90-day period.

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Boat House	Unknown disposal of used paint thinner	Failure to properly dispose of hazardous wastes	22a-449(c)- 102(a)(1) and (2) of RCRA; 40 CFR 262.11 and 262.34(c)(1)(i) and (ii).	A hazardous waste Collection site has been set up for the used paint thinner (this is a non- contiguous, CESQG site), individuals have been trained and all hazardous waste generated at the facility will be managed according to state and federal regulations. Approximately three ½ gallon containers of old solvent were removed, characterized and disposed as hazardous waste.	June 12, 2001 June 19, 2001	Individuals have been trained in proper SAS management, inspection and hazardous waste disposal. SASs have been set up at or near the point of hazardous waste generation. Wesleyan University has contracted with Triumvirate to ensure that laboratories and chemical use areas are frequently cleaned out, hazardous waste is identified and removed properly within each 90-day period.

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Physical Plant Hamlin Street Lock shop	Improper evaporation of 5 gallons of cleaner (Note: 15 gallons was correct amount)	Failure to properly dispose of hazardous wastes	22a-449(c)- 102(a)(1) and (2) of RCRA; 40 CFR 262.11 and 262.34(c)(1)(i)) and (ii).	15-gallons of kerosene- based solvent have been removed and parts washer was cleaned. Solvent and rinse water was drummed and removed as hazardous waste. Degreasing process has been discontinued.	June 12, 2001	Individuals have been trained in proper SAS management, inspection and hazardous waste disposal. SASs have been set up at or near the point of hazardous waste generation.
Physical Plant	No identified SAS,	Failure to	40 CFR	This room has been	June 15, 2001	Individuals have been

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Paint/Glazier	Improper management of hazardous waste	properly dispose of hazardous wastes	262.34(c)(1)(i)) and (ii).	“cleaned out” of approximately 25 gallons of waste and excess paints, and a waste paint SAS has been set up. Individuals have been trained on hazardous materials and hazardous waste management issues.		<p>trained in proper SAS management, inspection and hazardous waste disposal. SASs have been set up at or near the point of hazardous waste generation.</p> <p>A campus-wide chemical cleanout has been conducted. Wesleyan University has contracted with Triumvirate to ensure that laboratories and chemical use areas are frequently cleaned out, hazardous waste is identified and removed properly within each 90-day period.</p>
Outing House	No evidence of proper waste disposal	Failure to properly dispose	22a-449(c)- 102(a)(1) and	Two containers (less than 1 gallon each) of photo chemicals	June 13, 2001	Student-run dark rooms will be

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	for dark room chemicals	of hazardous wastes	(2) of RCSA; 40 CFR 262.11	have been removed and properly disposed. The dark room has been decommissioned and dismantled.		prohibited except where permitted for wastewater discharges and where a silver recovery unit is installed. Because students have historically set up unauthorized dark rooms in basements, students no longer have access to basement areas.
Center For Arts M-Building Paint Studio	Brushes saturated with turpinol are washed in the sink, excess turpinol is	Failure to properly dispose of hazardous wastes	22a-449(c)- 102(a)(1) and (2) of RCSA;	Process of washing brushes in the sink has been discontinued. Individual containers of turpinol have been substituted and when	June 19, 2001	Individuals have been trained in proper SAS management, inspection and

Building/Lab, Department	Issue or concern noted in March 28-30, 2001 Audit (April 27, 2001 Disclosure)	Formal violation disclosed	Specific Regulatory Cite for Disclosed Violation	Corrective Action Taken	Date of Completion	Steps Taken to Prevent Recurrence
	<p>excess turpinol is discharged to the sanitary sewer.</p> <p>Waste paint is disposed of in trash.</p>	<p>wastes</p> <p>Failure to properly dispose of hazardous wastes</p>	<p>(2) of RCSA; 40 CFR 262.11 and 262.34(c)(1)(i) and (ii).</p> <p>40 CFR 262.11 and 262.34(c)(1)(i) and (ii).</p>	<p>have been substituted and when used solvent is no longer viable, the solution is allowed to settle and then product is recycled or disposed as hazardous waste. An SAS has been established and personnel have been trained in proper hazardous waste management.</p> <p>All waste paints are collected at the SAS for disposal as hazardous waste.</p>	June 19, 2001	inspection and hazardous waste disposal. SASs have been set up at or near the point of hazardous waste generation.
Hall-Atwater/ undergraduate lab	Outdated chromate container	Failure to properly dispose of hazardous wastes	22a-449(c)-102(a)(1) and (2) of RCSA; 40 CFR 262.34(c)(1)(i) and (ii).	One container of Chromate, 100 g, was characterized and disposed of as hazardous waste.	May 14, 2001	Individuals have been trained in proper SAS management, inspection and hazardous waste disposal. SASs have been set up in or near the point of hazardous waste generation.
Hall-Atwater/ Lab	Several old cylinders	Failure to	22a-449(c)-	The cylinders were characterized	May 16, 2001	Individuals have been

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80	need to be disposed	properly dispose of hazardous wastes	102(a)(1) and (2) of RCRA; 40 CFR 262.34(c)(1)(i)) and (ii).	and disposed as hazardous waste.		trained in proper SAS management, inspection and hazardous waste disposal. SASs have been set up in or near the point of hazardous waste generation.
Hall-Atwater /room 105	Containers of old photo development chemicals need to be disposed	Failure to properly dispose of hazardous wastes	22a-449(c)- 102(a)(1) and (2) of RCRA; 40 CFR 262.34(c)(1)(i)) and (ii).	Approximately two gallons of photo chemicals were removed and properly disposed of as hazardous waste. Room has been decommissioned for photo processing and chemical processing. The SAS has been decommissioned.	June 14, 2001	Individuals have been trained in proper SAS management, inspection and hazardous waste disposal. SASs have been set up in or near the point of hazardous waste generation.
CFA M-Building	Waste oil paints are	Failure to	22a-449(c)-	Practice has been	June 19, 2001	Individuals have been

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Paint Shop	disposed of in the dumpster	properly dispose of hazardous wastes	102(a)(1) and (2) of RCRA; 40 CFR 262.34(c)(1)(i)) and (ii)..	discontinued. All paint wastes will be collected for proper disposal. SAS has been established for proper management of hazardous waste and individuals have been trained Protocols have been developed for future use of all paint products and equipment Copies of these protocols are available at 186 College St.		trained in proper SAS management, inspection and hazardous waste disposal. SASs have been set up in or near the point of hazardous waste generation